



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/678,330	10/03/2000	Keizo Kimura	2016-0165P	4810

2292            7590            01/11/2002

BIRCH STEWART KOLASCH & BIRCH  
PO BOX 747  
FALLS CHURCH, VA 22040-0747

EXAMINER

BALASUBRAMANIAN, VENKATARAMAN

ART UNIT            PAPER NUMBER

1624

DATE MAILED: 01/11/2002

6

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No. <b>09/678,330</b>	Applicant(s) <b>Kimura et al.</b>	
Examiner <b>Venkataraman Balasubramanian</b>	Art Unit <b>1624</b>	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1)  Responsive to communication(s) filed on Oct 14, 2001
- 2a)  This action is FINAL.      2b)  This action is non-final.
- 3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

### Disposition of Claims

- 4)  Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5)  Claim(s) \_\_\_\_\_ is/are allowed.
- 6)  Claim(s) 1-9 is/are rejected.
- 7)  Claim(s) \_\_\_\_\_ is/are objected to.
- 8)  Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9)  The specification is objected to by the Examiner.
- 10)  The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- 11)  The proposed drawing correction filed on \_\_\_\_\_ is: a)  approved b)  disapproved.
- 12)  The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. § 119

- 13)  Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

a)  All b)  Some\* c)  None of:

1.  Certified copies of the priority documents have been received.
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\*See the attached detailed Office action for a list of the certified copies not received.

- 14)  Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

### Attachment(s)

- 15)  Notice of References Cited (PTO-892)
- 16)  Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17)  Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_
- 18)  Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 19)  Notice of Informal Patent Application (PTO-152)
- 20)  Other: \_\_\_\_\_

## **DETAILED ACTION**

Applicants' response, which included amendment to claims 1-9, filed on 10/24/2001, is made of record.

Claims 1-9 are pending.

In view of applicants' response, all 112 rejections made in the previous officer action have been obviated. However, the following apply.

### ***Priority***

Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Japan on 9/30/1999. It is noted, however, that applicant has not filed a certified copy of the foreign application as required by 35 U.S.C. 119(b). This is a reminder

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Buell US 3,309,363 in view of Deguchi et al. US 5,395,742 for reasons of record. To repeat:

Buell teaches 4,4'-Bis (1,3,5-triazinylamino)stilbene-2,2'-disulfonic acid bearing dihydroxypropylamino groups for use as optical brightener. See formula shown on col.1 and example 1 on col. 3 for making the compound. Note the side chain, dihydroxypropylamino, is same as claimed herein.

Buell differs from the instant claims in not teaching or suggesting sulfoethylamine substituent on the triazine ring.

Deguchi et al. teaches several diaminostilbene compounds for photographic imaging. See formula I on col. 2 and note the definition of L1 and L2. Note on col. 3 lines 10-16 , Deguchi et al. teaches four or more substituents on L1 and L2. Also note L1 and L2 can be N R2 R3 which permits alkylamine with hydroxyl groups and sulfo groups as required herein. See col. 4-5 for various preferred embodiments and tables on col. 6-7 and 11 for compounds made.

Starting materials and the final products taught by these two references are analogous in that they cyanuric halide, substituted amines and 2,2-diaminostilbene sulfonic acid. Thus one having ordinary skill in the art at the time of the invention was made would have been motivated to combine both the primary and secondary references and employ the process taught by these prior art to the starting materials and reactants including those with aminoalkyl with two or more hydroxyl and sulfoalkylamino and expect to obtain the desired product because he would have expected the analogous starting materials and reactants react similarly. It has been held that application of an old process to an analogous material to obtain a result consistent with the teachings of the art would have been obvious to one having ordinary skill. Note In re Kerkhoven 205 USPQ 1069.

Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crounse et al. US 3,193,548 in view of Deguchi et al. US 5,395,742 for reasons of record. To repeat:

Crounse et al. several triazinyl stilbene compounds with hydroxyalkoxyalkylamino side chain in the triazine ring as optical brightening agents. See formula I on col. 1 and note the definition of Y1 and Y2. Note the teachings include equivalency of hydroxyalkylamino with hydroxyalkoxyalkylamino. See line 44 for a formula which is a side chain generically claimed herein. See col. 2-4 for preferred embodiments and col. 5-14 for examples of compounds made.

Crounse et al. differ from the instant claims in not teaching sulfoalkylamino side chain in addition to hydroxyalkoxyalkylamino.

Deguchi et al. teaches, as noted above, several diaminostilbene compounds for photographic imaging. See formula I on col. 2 and note the definition of L1 and L2, which includes aminoalkyl with two, or more hydroxyl and sulfoalkylamino.

Thus one having ordinary skill in the art at the time of the invention was made would have been motivated to combine both the primary and secondary references and employ the process taught by these prior art to the starting materials and reactants including those with aminoalkyl with two or more hydroxyl, hydroxyalkoxyalkylamino and sulfoalkylamino in view of the equivalency teaching and expect to obtain the desired product because he would have expected the analogous starting materials and reactants react similarly and yield product and have the same utility .

Applicants' argument to overcome the above two 103 rejections is considered but not persuasive.

Contrary to applicants' urging that without hindsight reasoning based on the teachings of instant application, there is no motivation for one trained in the art to

combine either of the primary reference, Buell or Crounse et al. with secondary reference Deguchi et al., the combination of either of the primary reference with the secondary reference has motivation which needs no hindsight reasoning based on the teachings of the instant application.

Buell teaches two hydroxyalkylamino substituents on the triazine ring and as emphasized by the applicants, which impart some troublesome properties. Deguchi et al. teaches, as noted above, both sulfonylalkylamino group as required by the instant claims and hydroxyalkylamino groups on the triazine ring. There is a clear equivalency teaching of these two groups. Hence one trained in the art would have been motivated to combine teachings of both the primary and secondary reference and expect to overcome the trouble some properties and obtain product of desirable properties for the utility taught.

The same reasoning applies to the second 103 rejection based on Crounse et al in view of Deguchi et al.

Again, Crounse et al. teaches hydroxyalkyloxyalkylamino group on triazine with equivalency teaching of one or more hydroxyl on alkylamino group and the secondary reference, as noted above, teaches both sulfonyl amino group as required by the instant claims and hydroxyalkylamino groups on the triazine ring. There is a clear equivalency teaching of these two groups. Hence there is motivation for one to combine the primary and secondary references and expect to obtain desirable product for the utility taught.

Hence the above two rejections arte proper and are maintained.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication from the examiner should be addressed to Venkataraman Balasubramanian (Bala) whose telephone number is (703) 305-1674. The examiner can normally be reached on Monday through Thursday from 8.00 AM to 5.30 PM. The fax phone number for the organization where this application or proceeding is assigned (703) 308-4556.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1235.

V.B.  
V. Balasubramanian

1/9/2002

*[Signature]*  
RICHARD L. RAYMOND  
PRIMACY FILING  
ART UNIT 1624